

display unit 140 plugs into the connection interface 146 via posts 98. The posts 98 are received into respective openings 148 at the connection interface 146. The edge connector 116 of the display unit 140 mates to the edge connector 128 of the stand 136. In a preferred embodiment the connection interface 146 defines an elongated surface 150. When the display unit is mounted to the stand 136 the face plate 114 of the display hinge is positioned flush to the surface 150. The display unit 140 is rotatable relative to the connection interface 46 via the display hinge 110. The display hinge 110 defines a pivot axis 152 (see FIG. 16) allowing a user to define the orientation of the viewing plane of the display unit 140.

The arm 144 is rotatable about an axis 156 relative to the stand base 142. The arm is movable between a first position in which the connection interface 46 is closest to the base 142 to a second position at which the connection interface 146 is removed from the base 142. Rotation of the arm 144 adjusts the height of the display unit 140. The axis 156 is defined by a hinge 158. In one embodiment the hinge 158 includes like components as the display hinge components 83, 85, and 115. The hinge 158 springs (e.g., 85) provide sufficient resistance to maintain the arm at a fixed position under the weight of the display unit 140. In various embodiments the base is of varying shape and size. The base 142, however, is of sufficient size to prevent the stand 136 from tipping under the weight of the display stand 140.

#### Meritorious and Advantageous Effects

One advantage of the invention is that a user can independently define positions for a notebook computer keyboard and display so as to improve ergonomic comfort, without compromising computer transportability. An advantage regarding the separate stand embodiment, is that the user can adjust the viewing height of the detached display.

Although preferred embodiments of the invention have been illustrated and described, various alternatives, modifications and equivalents may be used. Therefore, the foregoing description should not be taken as limiting the scope of the inventions which are defined by the appended claims.

What is claimed is:

#### 1. A portable computer, comprising:

a system unit having a keyboard and central processing unit;

a flat panel display unit removably attached to the system unit, the display unit folding relative to the system unit between an open position for viewing a display panel and a closed position at which the display panel is held to the system unit, wherein the display unit comprises a display housing, the display panel and a support, the display panel mounted to the display housing and defining a viewing plane, the support hinged to the display housing and defining a support plane; wherein the display panel is blocked from view when the display unit is in the closed position; and wherein the display unit rests upon the support when detached from the system unit, the display housing rotating relative to the support to define an angle between the viewing plane and the support plane; and

means for locking the display unit to the system unit; wherein the display unit is undetachable from the system unit while locked; and wherein the display unit is rotatable relative to the system unit while locked; and means for blocking the display unit from achieving the closed position when the display unit is attached to the system unit, is unlocked relative to the system unit, and is rotatable relative to the system unit toward the closed position.

2. The portable computer of claim 1, further comprising means for indicating whether the display unit is locked or unlocked when attached to the system unit.

3. The portable computer of claim 2, in which the indicating means comprises the blocking means.

#### 4. A portable computer, comprising:

a system unit having a keyboard and central processing unit;

a flat panel display unit removably attached to the system unit, the display unit folding relative to the system unit between an open position for viewing a display panel and a closed position at which the display panel is held to the system unit, wherein the display unit comprises a display housing, the display panel and a support, the display panel mounted to the display housing and defining a viewing plane, the support hinged to the display housing and defining a support plane; and wherein the display unit rests upon the support when detached from the system unit, the display housing rotating relative to the support to define an angle between the viewing plane and the support plane; and means for locking the display unit to the system unit; wherein the display unit is undetachable from the system unit while locked; and wherein the display unit is rotatable relative to the system unit while locked; and means for preventing the display unit from achieving a closed position when the display unit is unlocked relative to the system unit; and

wherein the support comprises a first support and a second support, the first support and second support being independently rotatable relative to the viewing plane, the first support and second support defining the support plane when supporting the display unit, the first support and second support rotatable about a common first axis to define the support plane, the first support rotatable about a second axis for rotating within the support plane, the second support rotatable about a third axis for rotating within the support plane.

5. The portable computer of claim 4, wherein the preventing means blocks the display unit from achieving a closed position when the display unit is attached to the system unit while the display unit is unlocked relative to the system unit.

6. A portable computer and display stand combination, the display stand for supporting the display unit when detached from the system unit, the display stand being adjustably positioned apart from the system unit,

the portable computer comprising:

(a) a system unit having a keyboard and central processing unit; and

(b) a flat panel display unit removably attached to the system unit, the display unit folding relative to the system unit between an open position for viewing the display panel and a closed position at which the display panel is held to the system unit, the display unit comprising: (i) a display housing, and (ii) a flat panel display; and

the display stand comprising:

(a) a base upon which the display stand rests;

(b) means for receiving the display unit when detached from the system unit;

(c) an arm coupling the base and receiving means, the arm rotatable relative to the base to define an adjustable height for viewing the display unit; and

(d) means for maintaining signal communication between the display unit and the system unit.